External Interfaces

Tiger City IMX Industrial Computer with Linux OS

DIO read

This example shows how to use DIO (Digital Input Output) of the Tiger computer in the read mode. After running the program, the state of every DIO will be displayed.

- DIO_read - C example
- DIO_read - Python example
- DIO_read - Bash example

Connections

In order to test, the program uses **H1 - H7** pins (diagram provided at the bottom of this page).

DIO write

This example shows how to use DIO (Digital Input Output) of the Tiger computer in the write mode.

- DIO_write - C example
- DIO_write - Python example
- DIO_write - Bash example

Connections

In order to test, the program uses **H1 - H7** pins (diagram provided at the bottom of this page).

DI read

This example shows how to read the states of the DI (Digital Input) of the Tiger computer. After running the program, the state of every DI will be displayed.

- DI_read - C example
- DI_read - Python example
- DI_read - Bash example

Connections

In order to test, the program uses **D1 - D5** pins (diagram provided at the bottom of this page).

ETHERNET

This example shows how to check the Ethernet port connection of the Tiger computer.

- ETHERNET - C example
- ETHERNET - Python example
- ETHERNET - Bash example

Connections

In order to test, the program uses the **RJ45** port (diagram provided at the bottom of this page).

1-WIRE

This example shows how to read temperature from the DS18B20+ sensor using the 1-Wire bus of the Tiger computer.

- onewire - C example
- onewire - Python example
- onewire - Bash example

Connections

In order to test, the program uses **1W, 5V** and **GND** pins (diagram provided at the bottom of this page).

RS232

This example shows how to write to and read from the RS232 interface of the Tiger computer.

- RS232 - C example
- RS232 - Python example
- RS232 - Bash example

> This example won't work in the loopback connection test - an external serial monitor is needed.

Connections

In order to test, the program uses **T1, R1, T2, R2** and **GND** pins (diagram provided at the bottom of this page).

RS485

This example shows how to write to and read from the RS485 interface of the Tiger computer.

- RS485 - C example
- RS485 - Python example
- RS485 - Bash example

> This example won't work in the loopback connection test - an external serial monitor is needed.

Connections

In order to test, the program uses **A1 - A4, B1 - B4** and **GND** pins (diagram provided at the bottom of this page).

UIO AI 10 V

This example shows how to use the UIO (Universal Input Output) of the Tiger computer as a voltage AI (Analog Input).

- UIO_AI_10V - C example
- UIO_AI_10V - Python example
- UIO_AI_10V - Bash example

Connections

In order to test, the program uses **U1 - U4** pins (diagram provided at the bottom of this page).

UIO AI 20 mA

This example shows how to use the UIO (Universal Input Output) of the Tiger computer as a current AI (Analog Input).

- UIO_AI_20mA - C example
- UIO_AI_20mA - Python example
- UIO_AI_20mA - Bash example

Connections

In order to test, the program uses **U1 - U4** pins (diagram provided at the bottom of this page).

UIO AO

This example shows how to use the UIO (Universal Input Output) of the Tiger computer as an AO (Analog Output).

- UIO_AO - C example
- UIO_AO - Python example
- UIO_AO - Bash example

Connections

In order to test, the program uses **U1 - U4** pins (diagram provided at the bottom of this page).

UIO DI

This example shows how to use the UIO (Universal Input Output) of the Tiger computer as a DI (Digital Input).

- UIO_DI - C example
- UIO_DI - Python example
- UIO_DI - Bash example

Connections

In order to test, the program uses **U1 - U4** pins (diagram provided at the bottom of this page).

USB

This example shows how to open, write to, and read from a USB device plugged into the Tiger computer.

- USB - C example
- USB - Python example
- USB - Bash example

Connections

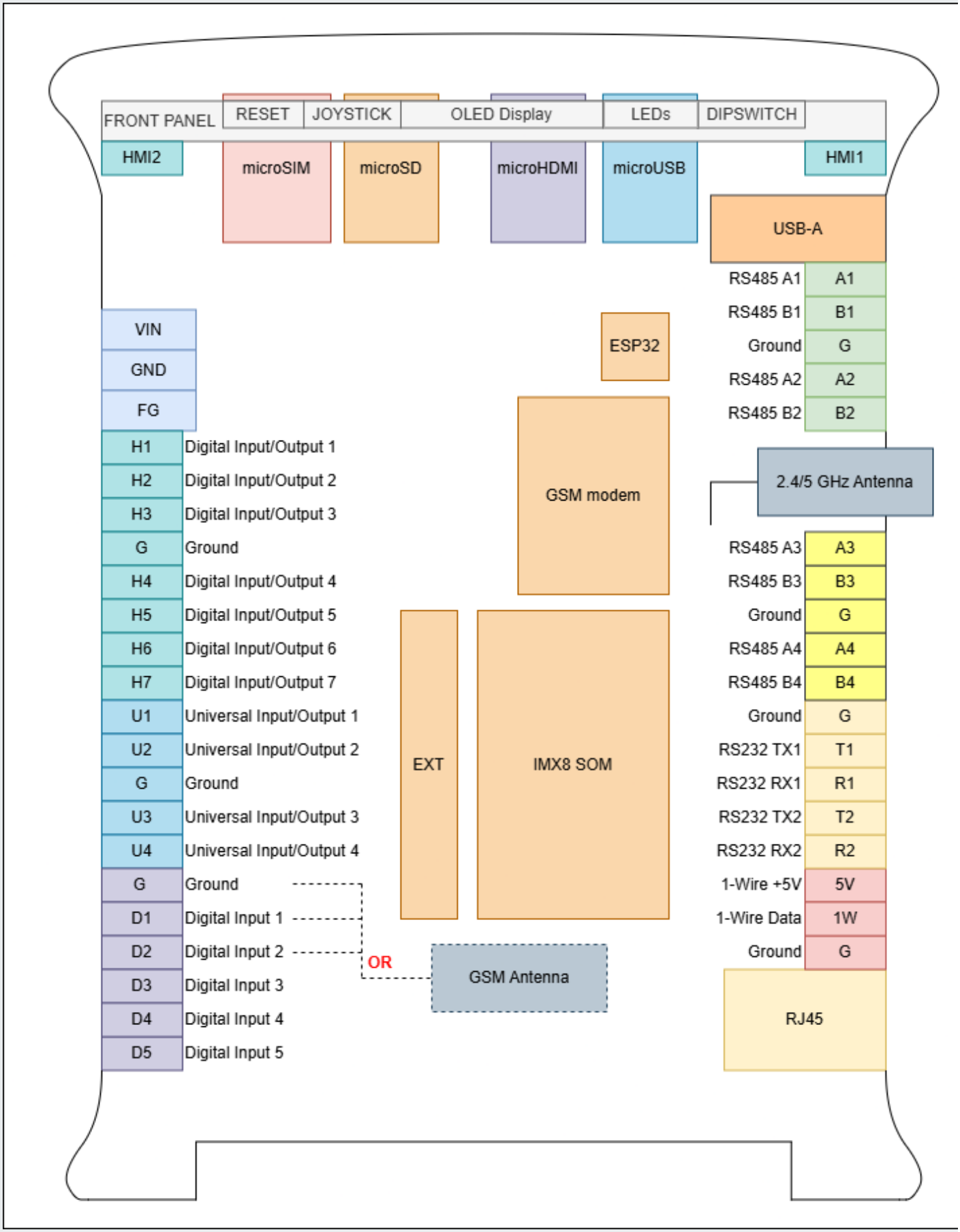
In order to test, the program uses the USB port (diagram provided at the bottom of this page).

Wi-Fi

This example shows how to connect the Tiger computer to a Wi-Fi access point.

- Wi-Fi - C example
- Wi-Fi - Python example
- Wi-Fi - Bash example

Ports diagram



Revision #45
Created 10 April 2024 14:31:20

Updated 6 August 2025 08:24:33 by Michał Grabski